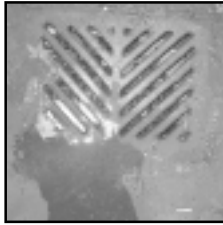
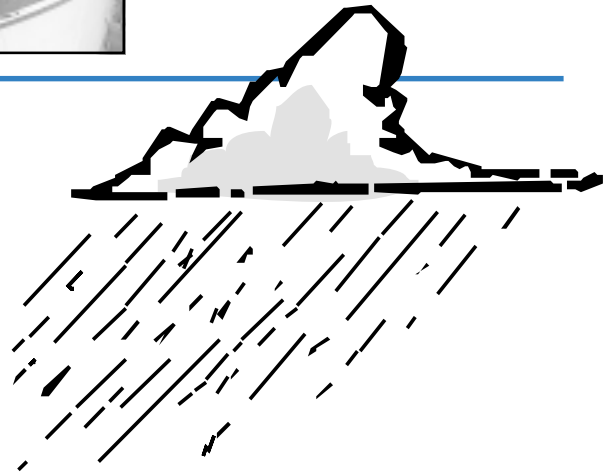


Fact Sheet: Discharging Contaminated Stormwater into the King County Sewer System



King County
Department of
Natural Resources and Parks
Industrial Waste Program

Under what conditions does King County accept contaminated stormwater into the sanitary sewer?



King County accepts contaminated stormwater to the sewer system when:

1. Contamination is the result of an industrial activity;
2. Contamination of the stormwater cannot be prevented with Best Management Practices (BMPs);
3. Other disposal options that control pollutants at a reasonable cost are not available;
4. The discharge meets flow restrictions, and King County discharge limits;
5. The volume of stormwater discharge has been minimized through the use of best management practices;
6. The discharger pays sewer fees to the local sewer agency;
7. The sewerage system has capacity to handle the waste without overflows.

All conditions must be met.

Topic overview

How do I get permission to discharge contaminated stormwater to the King County sewer system?

What are “Best Management Practices (BMPs)”?

How do I show that stormwater has been contaminated by “industrial activity”?

How do I show that other disposal options are not reasonable?

What flow restrictions apply to a contaminated stormwater discharge?

How can I minimize the volume of flow going to the sanitary sewer?

What discharge limits apply to contaminated stormwater discharges to the King County sewer?

What fees apply to contaminated stormwater discharges?

December 2003

Introduction

The requirements in this document do not apply to areas where the sewer and stormwater systems are combined (primarily areas within the City of Seattle). Most stormwater in these areas already goes to the sanitary sewer. However, King County may require best management practices (BMPs) or pretreatment of contaminated industrial stormwater in combined areas. Call King County Industrial Waste (206-263-3000) to determine if your site is in a combined sewer area.

King County intends its stormwater-acceptance practice to provide the greatest environmental protection of surface waters in a way that is economically viable for industry and King County's ratepayers.

King County recognizes that it is not always possible or practical for businesses to prevent the contamination of stormwater associated with industrial activities, or to treat industrial stormwater before discharging it to surface waters. However, in many areas, the county's sewer capacity is limited, particularly during wet weather months (November - April). Industries should take care not to cause or add to sewage overflows.

How do I get permission to discharge contaminated stormwater to the King County sewer system?

Submit a waste discharge application to King County for approval. Depending on the nature of the facility, the volume of discharge, the type of pollutants, and other site conditions, different types of discharge approvals may be issued. The burden is on the discharger to show why a specific area should drain to the sanitary sewer system instead of the storm drain system.

Vehicle wash pads 200 square feet or less do not require an application unless an oil-water separator is installed.

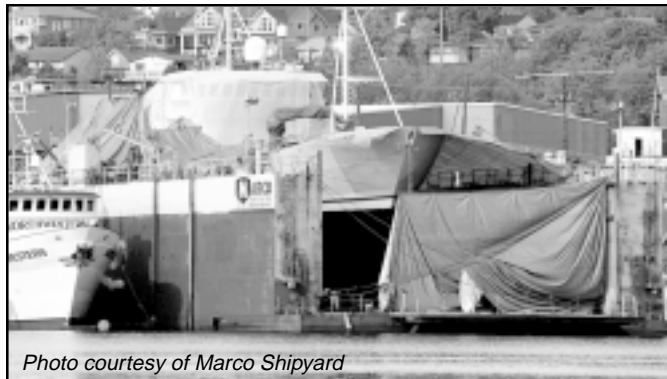


Photo courtesy of Marco Shipyard

What are “Best Management Practices (BMPs)”?

BMPs are activities, practices and procedures that prevent or reduce the release of stormwater or pollutants to the waters of Washington State or to the King County sewer system.

Examples include:

- Prevent or confine drips and spills.
- Enclose or cover process areas.
- Provide spill prevention and clean-up equipment.
- Relocate activities to covered areas.
- Install catch basin inserts and/or oil-water separators.
- Reconfigure slopes and install berms.
- Segregate industrial activities from non-industrial activities.
- Tarp over and under painting and paint-preparation areas.
- Regularly clean process areas.
- Retain and use stormwater for process water, irrigation, or wash-down water.
- Maintain equipment to prevent leaks.
- Train and educate employees, management, and customers
- Other sources of BMP information include Washington State Department of Ecology's *Stormwater Management in Washington State, Volume IV, Source Control BMPs* <http://www.ecy.wa.gov/biblio/9914.html> and the King County *Stormwater Pollution Control Manual*, <http://dnr.metrokc.gov/wlr/dss/spcm.htm>

King County will **not** accept contaminated stormwater into the sewer system if implementing BMPs would make the stormwater acceptable for discharge to state waters.

How do I show that stormwater has been contaminated by “industrial activity”?

Stormwater becomes contaminated by industrial activity when it falls on areas with material handling equipment or activities, raw materials, intermediate products, final products, waste materials, byproducts, or industrial machinery. (See King County Code 28.82.360 for a complete list.)

You may be required to submit analyses of stormwater samples to show the level of contamination from an industrial activity.

How do I show that other disposal options are not reasonable?

King County may require the discharger to submit an engineering analysis report showing that discharge to the sanitary sewer represents all known, available, and reasonable methods of prevention, control, and treatment (AKART). Washington State Surface Water Quality Standards (Chapter 173-201 WAC) define AKART as “represent(ing) the most current methodology that can be reasonably required for preventing, controlling, or abating the pollutants associated with the discharge.”

If the stormwater can be adequately treated and discharged to state waters at a reasonable cost, King County will **not** accept the discharge.



Before beginning an AKART analysis, you should meet with an Industrial Waste Investigator to determine the extent of analysis needed.

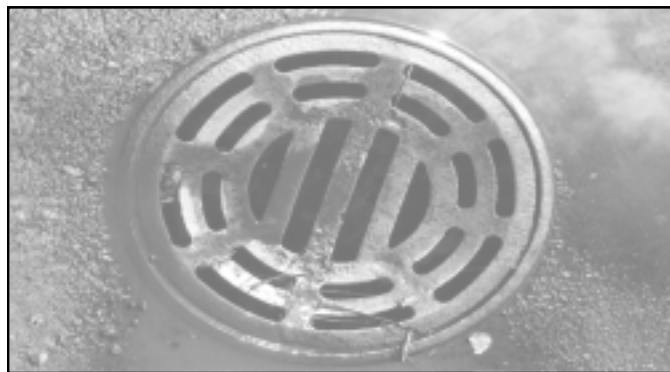
What flow restrictions apply to a contaminated stormwater discharge?

When the total area draining to the sewer system is greater than 2,000 square feet the discharge rate of contaminated industrial stormwater is restricted to 0.2 cubic feet per second for each acre of stormwater drainage area. Storage capacity to retain the water on site or a system to restrict flow, such as a valve, may be required.

Example

XYZ Boatyard is a 1.5 acre boat repair facility located in Seattle, WA. Of the total 1.5 acres, 0.7 acres of surface area were identified as generating non-contaminated stormwater and were diverted to a separate storm drainage system. The remaining 0.8 acres of surface area were identified as generating contaminated industrial stormwater. The stormwater flows from this area were diverted to a separate stormwater detention tank connected to the sanitary sewer. The contaminated stormwater detention tank was equipped with a flow restriction device (e.g., orifice restriction, metering valve, etc.) which was established at a maximum discharge rate of 0.16 cubic feet per second ($0.2 \text{ cfs/acre} \times 0.8 \text{ acre} = 0.16 \text{ cfs}$). Overflows from the contaminated stormwater detention tank were diverted to storm drainage in accordance with the stormwater detention requirements of the local surface water quality authority.

Local sewer agencies may require a slower discharge rate or the construction of additional lines if they do not have enough capacity in the local sewer lines.



How can I minimize the volume of flow going to the sanitary sewer?

There are two primary ways to minimize the flow of contaminated stormwater. Dischargers can minimize the volume by reducing or eliminating discharge from parts of an industrial site that are not contaminating stormwater, such as discharges from roof drains, parking lots, storage areas and driveways. King County frequently requires industrial users to reconfigure drainage systems for this purpose.

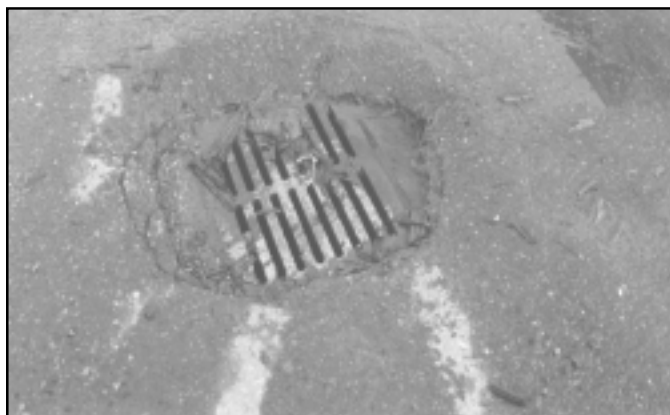
Dischargers can also minimize contamination by using BMPs, allowing stormwater to flow to the state waters.

Overflow from retention or flow-restriction systems cannot go to the sanitary sewer system. Options include more on-site retention, overflow to the storm drain system, and infiltration back into the ground.

What discharge limits apply to contaminated stormwater discharges to the King County sewer?

Dischargers of contaminated stormwater are required to meet King County's local discharge limits for all contaminants, including, but not limited to, heavy metals, settleable solids, oil and grease, and pH.

King County local limits and their applicability to businesses in the sewer service area are cited in King County Code – Title 28 (<http://www.metrokc.gov/mkcc/COCE/Title28PDF>) and in King County Industrial Waste Local Discharge Limits (<http://www.metrokc.gov/recelec/archives/policies/put813pr.htm>).



What fees apply to contaminated stormwater discharges?

Permit fees, sewer fees, monitoring fees, and capacity charges may apply to stormwater discharges. For information on the specific fees that may apply to your discharge, call King County Industrial Waste Program at 206-263-3000 or visit our website: <http://dnr.metrokc.gov/wlr/indwaste/fees.htm>.

Where the discharge to the sewer system is not metered, the volume of contaminated stormwater will be determined by the amount of precipitation falling on the area draining to the sewer. The precipitation amount will be a five year rolling average based on National Weather Service data in Seattle. Billing arrangements may differ among local sewer agencies.

For More Information

For more information or to obtain a waste discharge permit application and a supplemental application for discharge of contaminated stormwater, which must accompany the permit application, contact:

King County Industrial Waste Program
130 Nickerson Street, Suite 200
Seattle, Washington 98109-1658
206-263-3000
206-263-3001 fax
<http://dnr.metrokc.gov/wlr/indwaste/index.htm>

This information is available in alternative formats on request at (206) 263-3000 (voice) or 711 (TTY).

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